

Abstract of the Disclosure

A method and apparatus for repair of AAA uses a graft that is introduced intraluminally and secured through laparoscopic and percutaneous access to the repair site. The arterial graft is a flexible, tubular sleeve that is free of any stent structure. A catheter assembly for delivering the graft includes a removable mechanical expansion assembly that is temporarily expanded to impinge the graft ends against the arterial wall to enable fixation of the graft ends. The fastener assembly for securing the graft includes an inner retention member and a pair of deformable wires extending from the inner retention member. The inner retention member is inserted via needle through the arterial wall and the graft and tension is applied to the wires and the inner retention member pulls the graft end into close impingement with the intimal surface of the vessel.